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## IMO/IHO GUIDE TO DRAFTING RADIO NAVIGATIONAL WARNINGS FOR THE WORLD-WIDE NAVIGATIONAL WARNING SERVICE

- The Sub-Committee on Radiocommunications at its thirty-eighth session (18 to 22 January 1993), noted an IMO/IHO Guide to Drafting Radio Navigational Warnings for the World-Wide Navigational Warning Service (WWNWS) prepared by the IHO Commission on the Promulgation of Radio Navigational Warnings (CPRNW) and considered that this standardized text, annexed hereto, will be of great value to those who write navigational warnings and to mariners at sea who must understand the warnings they receive.
- 2 The Sub-Committee encouraged the widest possible use of this document and approved it for circulation to Governments.
- 3 Member Governments are invited to bring the annexed IMO/IHO Guide to the attention of mariners and those involved in the promulgation of navigational warnings.

\* \* \*

#### ANNEX

# IMO/IHO GUIDE TO DRAFTING RADIO NAVIGATIONAL WARNINGS FOR THE WORLD-WIDE NAVIGATIONAL WARNING SERVICE

#### 1 <u>JNTRODUCTION</u>

1.1 This book provides a practical guide for anyone who is concerned with drafting radio navigational warnings. It is assumed throughout that the warnings are being issued under the auspices of the IHO/IMO World-Wide Navigational Warning Service (WWNWS) and in accordance with the requirements of IMO Resolution A.706(17). The WWNWS includes two major international radio warning services as components; namely, NAVAREA warnings and Coastal warnings.

10

- 1.2 It is particularly intended to provide the best form of words for use in all types of navigational warnings in the English language [See Note 1.]. Note has been taken of the Standard Marine Navigational Vocabulary, where appropriate:
- 1.3 This document cannot provide specimen texts for every type of event which may occur. However, the principles illustrated herein may be applied in general to drafting messages for every kind of navigational warning and covering all types of hazards.

#### 2 GENERAL CONSIDERATIONS

- 2.1 Radio Navigational Warnings are essentially HAZARD WARNINGS [See Note 2.]. As such they are issued in response to SOLAS V/2.b and carry information which may have a direct bearing on the safety of life at sea. It is the fundamental nature of navigation warnings that they will often be based on incomplete or unconfirmed information and mariners will need to take this into account when deciding what reliance to place on the information contained therein.
- 2.2 IMO Resolution A.706(17) requires the use of the English language for NAVAREA and Coastal Warnings of the WWNWS. It must always be remembered that the majority of mariners receiving radio navigational warnings are only professional users of English who do not speak or read it naturally. Warnings therefore must be written so as to be easily understood by all mariners.
- 2.3 In order to achieve maximum impact on the mariner it is necessary to present information so that it is CLEAR, UNAMBIGUOUS and BRIEF. This can be ensured by using structured messages which present the text in a standard format with key words to emphasize the most important features of the message.
- 2.4 The resources employed by administrations and the mariner are extremely limited. Thus only information which is vital to the safe conduct of vessels should be transmitted. Notices to Mariners and other means exist for passing less urgent information to ships after they have reached port. Information of a purely administrative nature should never be broadcast on the regular international navigational warning schedules.

#### Notes:

- 1. See WWNWS Guidance Document, section 5.3
- 2. See WWNWS Guidance Document, section 4.2.1.3

### 3 THE STRUCTURE OF RADIO NAVIGATIONAL WARNINGS

3.1 The minimum information which a mariner requires to avoid danger is:

#### HAZARD + POSITION

It is usual, however, to include sufficient extra detail to allow some freedom of action in the vicinity of the hazard. This means that the message must give enoughl tixtra data for the mariner to be able to RECOGNIZE the hazard and ASSESS its effect upon his navigation. In some cases it will be desirable to include an estimate of the DURATION of the event.

3.2 The text of any radio navigational warning will need to contain some or all of the STANDARD ELEMENTS, as indicated below:

| STANDARD ELEMENTS |                          | NAVAREA | COASTAL | LOCAL    |
|-------------------|--------------------------|---------|---------|----------|
| Message ID*       | Consecutive No.          | *       | *       |          |
| Preamble          | 1. General Area          | *       |         |          |
|                   | 2. Locality              | *       | *       | *        |
| •                 | 3. Chart Number          | *       | *       |          |
| Warning           | 4. Key Subject           | *       | *       | *        |
|                   | 5. Geographical Position | . *     | *       | •        |
|                   | 6. Amplifying Remarks    | *       | *       | <b>+</b> |
| Postscript        | 7. Cancellations         | *       | *       | *        |

<sup>\*</sup> See WWNWS Guidance Document, section 5.1

3.3 The remainder of this book is divided into three sections, which give guidance on the correct way of phrasing each part of the warning to achieve maximum impact with minimum broadcast time, as follows:

Section A - Preamble

Section B - Warning (by type of hazard, as described in detail in the WWNWS Guidance Document, section 4.2.1.3.

Section C - Additional notes on Time and Position

# PREAMBLE STATE OF THE STATE OF

## IDENTIFIER, GENERAL AREA, LOCALITY, CHART

| MESSAGE IDENTIFIER | The first words of the text of every warning message must always be MESSAGE SERIES IDENTIFIER followed by the CONSECUTIVE NUMBER e.g. NAVAREA THREE 496; NAVAREA SEVEN 042; NITON RADIO WZ 229; OOSTENDE RADIO NAV WNG 767.  Note: 1) Message numbers re-start at 001 each year. 2) The Consecutive Number is not the same as the NAVTEX Number B3B4.  |
|--------------------|--|
| GENERAL AREA       | The General Area should be sufficient to identify which broad sub-division of a NAVAREA the message affects. For instance 'NORTH SEA' or 'MALACCA STRAIT' would be correct; 'NORTH AMERICA, EAST COAST' is too general. NAVAREA-wide events, e.g. OMEGA or SATNAV warnings, use a NAVAID IDENIFICATION ACRONYM instead of a General Area (See page B9) |
| LOCALITY           | The Locality should be stated in terms which allow the mariner to identify warnings which affect his passage without having to plot them e.g. 'Thames Estuary' or 'Pinang Approach'. Locality will only need to be stated when it is desirable to refine the General Area.   |
| CHART NUMBER       | NAVAREA Warnings normally require reference to a chart of the locality if one exists, (not necessarily the largest scale). The Chart Series should always be quoted, e.g. Chart INT 649, Chart BA 471.  Chart numbers are not normally required for Coastal and Local Warnings which are only broadcast in the vicinity of the hazard.                 |

LIGHTS - Casualties

**B1** 

| LIGHTHOUSES BEACONS LIQUELES   |                           |   |
|--|---------------------------|---|
| LIGHTHOUSES, BEACONS, LIGHT VESSELS  |                           |   |
| Key Subject  | Remarks                   | Comments  |
| MALABRIGO POINT LIGHT, 24-45N 33-56E<br>SANDETTIE LIGHTVESSEL, 51-14N 02-33E | UNLIT                     | Incorrect Terms include: Out,<br>Existinguished, Not Burning, Not<br>Working.                                   |
| PHILIP SHOAL BEACON, 16-21.5S 46-37.5W                                       | LIGHT<br>UNRELIABLE       | Incorrect Terms include: Weak, Dim, Low Power, Fixed, Flashing Incorrectly, Out of Character.                   |
|  | DESTROYED                 | Temporarly Destroyed is incorrect. Note: If temporary buoy established, see WRECKS page for additional phrases. |
|  | FOG SIGNAL<br>INOPERATIVE | Only for major fog signal stations. Generally, fog signal casualties will not need a broadcast.                 |

..OTES: A. Use CHARTED names, not LISTED names.

B. LIGHT LIST number not required.

C. POSITION normally quoted to nearest whole minute.

- D. If the report is unconfirmed, use LIGHT UNRELIABLE. Do not use "REPORTED".
- E. Temporary use of a listed reserve light is to be expected. It is not a change of character.

F. Damage to DAYMARKS is not usually worth a navigational warning.

G. Do not use a navigational warning to request reports on an unwatched light.

H. International Chart Abbreviations for light characters are ONLY suitable for NAVTEX, Telex or Morse transmissions. Voice Broadcasts should be drafted using the Table of Equivalents page. This is perferred for NAVTEX, Telex and Morse also.

NEW and CHANGED Lights - see page B2 and B3 Light Vessels OFF STATION - see page B5

## **LIGHTS - CHANGED**

**B2** 

## LIGHTHOUSES, BEACON, LIGHT VESSELS

| Key Subject   | Remarks  | Comments   |  |
|---|--|--|--|
| ORFORDNESS LIGHT, 51-30N 00-20E<br>ST. ALBANS HEAD LIGHT, 51-00N 00-16E | CHANGED TO<br>FLASH THREE 20<br>SECONDS<br>14 FEET<br>16 MILES | PERMANENT change of character.                               |  |
|   | TEMPORARILY<br>CHANGED TO<br>QUICK FLASH<br>YELLOW 12<br>MILES | Temporary change.<br>Do not use for listed<br>reserve light. |  |

NOTE: A. Always quote FULL LIGHT CHARACTERISTIC to avoid confusion over what has been changed.

B. Use light descriptions as given on page B4

C. Position is normally quoted to nearest whole minute for existing lights. See page B3 for new or changed positions.

## **LIGHTS - NEW and MOVED**

**B3** 

| LIGHTHOUSES | BEACONS, LIGHT VESSELS |
|-------------|------------------------|
|-------------|------------------------|

| Key Subject  | Remarks   | Comments   |
|--|---|--|
| FLAMBOROUGH HEAD LIGHT, FLASH THREE<br>20 SECONDS 22 METRES 21 MILES<br>NARESBORO LIGHTVESSEL, FLASH RED | ESTABLISHED<br>21-14. 6N<br>00-16.3W                    | New Light.   |
| 5 SECONDS 14 MILES   | MOVED 3<br>CABLES<br>NORTH TO<br>63-14. 8N<br>22-15. 6E | Do not quote former geographical position. Indicate former position by approximate direction and distance. |
|  | RE-ESTABLISHED  | For CHARTED or LISTED as DESTROYED. See NOTE A.  |

NOTES: A. RE-ESTABLISHED is only appropriate for lights which have previously been CHARTED or LISTED as DESTROYED. Navigational Warnings concerning such lights are merely Cancelled when the light is Re-established. A new Navigational Warning is only required if the Character or Position is changed. See page 82 or above.

B. Quote accurate CHARTED position, in Degrees, Minutes and Decimal Minutes (maximum 2 decimal places).

C. Distances should be quoted in miles and decimal miles.

## LIGHTS - GLOSSARY OF DESCRIPTIVE TERMS

**B**4

| CLASS OF LIGHT  | Description for NAVAREA broadcasts | Description for<br>Coastal or Local<br>broadcasts  |
|---|------------------------------------|--|
| Fixed (steady light)  | F                                  | Fixed  |
| Occulting (total duration of light more than dark)                  |                                    |  |
| Single-occulting  | <b>Oc</b> -                        | Occulting  |
| Group-occulting   | Oc(2)                              | Occulting Two                                      |
| Composite group-occulting   | Oc(2+3)                            | Occulting two plue three                           |
| tsophase (equal periods light and dark)                             | ISO                                | ISO  |
| Flashing (total duration of light less than dark)                   |                                    |  |
|   |                                    |  |
| Single-flashing   | FI 🕖                               | Flash  |
| Long-flashing   | LFI                                | Long Flash   |
| Group-flashing  | FI(3)                              | Flash Three  |
| Composite group-flashing  | FI(2+1)                            | Flash two plus one                                 |
| Quick (50 to 79-usually either 50 or 60 flashes per minute)         |                                    |  |
| Continuous quick  | Q                                  | Quick Flash  |
| Group Quick   | Q(3)                               | Quick Flash Three                                  |
| Interrupted quick   | IQ                                 | Interrupted Quick Flash                            |
| Von Quick /00 to 150 untally ofther 100                             |                                    |  |
| Very Quick (80 to 159-usually either 100 or 120 flashes per minute) |                                    |  |
| Continuous very quick   | VQ                                 | Very Quick Flash                                   |
| Group very quick  | VQ(3)                              | Very Quick Three                                   |
| Interrupted very quick  | IVQ                                | interrupted Very Quick Flash                       |
| Ultra Quick (160 or more-usually 240 or 300 flashes per minute)     |                                    | ·  |
| Continuous ultra quick<br>Interrupted ultra quick                   | UQ<br>IUQ                          | Ultra Quick Flash<br>Interrupted Ultra Quick Flash |
| Morse Code  | Mo(K)                              | Morse Kilo   |
| Fixed and Flashing  | FFI                                | Fixed and Flashing                                 |
| Alternating   | ALWR                               | Alternating  |

## LIGHTS GLOSSARY OF DESCRIPTIVE TERMS

B4-2

|                                   |   |   |                             | <u></u>                                       | D4-2 |
|-----------------------------------|---|---|-----------------------------|---|------|
| COLOR                             | ELEVATION In METERS or FEET, e.g. 14 METERS, 21 FEET. |   |                             |   |      |
| White<br>Red                      |   |   |                             |   | 1,   |
| Green<br>Yellow<br>Orange<br>Blue | PERIOD in   | IOD in SECONDS, e.g. 15 SECONDS ( NOT Sec or S) |                             |   |      |
| Violet                            |   |   |                             |   |      |
| RANGE<br>in sea mile              | es  |   | International abbreviations | RANGE for broadcast                           |      |
| Single range                      | 9   | e.g.  | 15M                         | 15 MILES                                      |      |
| 2 ranges                          |   | e.g.  | 14/12M                      | 14 AND 12 MILES                               |      |
| 3 or more ra                      | nges  | e.g.  | 22-18M                      | 22 TO 18 MILES                                |      |
|                                   |   |   |                             | Shortest Range only will often be sufficient. |      |
|                                   |   |   |                             |   |      |

**BUOYS** 

**B5** 

| BUOYS, LANBYS, SUPERBUOYS |   |  |  |
|---------------------------|---|--|--|
| Remarks                   | Comments  |  |  |
| UNLIT                     | Incorrect terms include: Out,<br>Extinguished, Not burning, Light<br>unlit.                                 |  |  |
|                           |   |  |  |
| LIGHT<br>UNRELIABLE .     | Incorrect terms include: Weak, Dim, Low power, Fixed, Out of Character, Irregular, Reduced power.           |  |  |
|                           |   |  |  |
| DAMAGED                   | No action for Topmark or Radar<br>Reflectors. Use only for major<br>damage, e.g. loss<br>of superstructure. |  |  |
| OFFSTATION                | Buoys not in charted position.  |  |  |
| MISSING                   | Completely absent from position.  |  |  |
|                           | New buoy. Quote position to 2 decimal minutes if possible.  |  |  |
|                           | UNLIT  LIGHT UNRELIABLE  DAMAGED  OFFSTATION  |  |  |

NOTES: A. Do not use 'Reported'

B. POSITION normally quoted to nearest whole minute.

C. UNLIT may be used to amplify 'DAMAGED' as in 'DAMAGED and UNLIT'.

D. 'LANBY' (Large Automated Navigational Buoy)' or 'SUPERBUOY' may be used in lieu of 'BUOY' where appropriate.

E. Do <u>NOT</u> describe the type of buoy, e.g. North Cardinal buoy, wreck buoy, Port Hand buoy unless the buoy is unnamed.

## **GLOSSARY OF BUOYAGE TERMS**

## **B5-2**

| GEOGRAFI OF BOOTAGE TERMS  | IO DO-2  |  |  |
|--|--|--|--|
| IALA BUOYAGE   | Comments   |  |  |
| PORT) HAND BUOY STARBOARD)  NORTH) EAST) SOUTH) CARDINAL BUOY WEST)  ISOLATED DANGER BUOY  SAFE WATER BUOY  SPECIAL BUOY | Full Description of light and colour not required for IALA standard buoys. "Lightbuoy" may be used to indicate that the buoy is lit. |  |  |
| OTHER BUOYS  |  |  |  |
| COLOURS PATTERN  | SHAPE/TYPE   |  |  |

| COLOURS                                  | <u>PATTERN</u>                                    | SHAPE/TYPE   |
|--|---|--|
| RED<br>BLACK<br>WHITE<br>GREEN<br>YELLOW | CHEQUERED HORIZONTALLY STRIPED VERTICALLY STRIPED | CAN CONICAL (not OGIVAL or NUN) SPAR SPHERICAL WRECK CABLE (not Telegraph) MOORING DANGER ZONE ODAS SINGLE POINT MOORING [not SPM] |

## **BOTTOM FEATURES**

**B6** 

| WRECKS, REEFS, ROCKS  |                                      |  |  |  |
|---|--------------------------------------|--|--|--|
| Key Subject   | Comments                             |  |  |  |
| UNCHARTED REEF REPORTED 03-42S 016-21W                                  | Position unconfirmed                 |  |  |  |
| DANGEROUS WRECK LOCATED 34-15.2W 014-15.5W                              | Position confirmed usually by survey |  |  |  |
| VOLCANIC ACTIVITY REPORTED CAUTION ADVISED.                             |                                      |  |  |  |
| ARTHUR ISLAND reported to lie about two miles west of charted position. |                                      |  |  |  |
|   |                                      |  |  |  |

Notes: A. These reports may be amplified as follows: "..... marked by south cardinal buoy 0.2 miles southward."

B. Position Approximate (PA) is not appropriate since all "reported" hazards will be of this nature by definition.

## **DRIFTING HAZARDS**

**B7** 

| Key Subjects  | Comments  |  |
|---|---|--|
| SUPERBUOY ADRIFT IN VICINITY AT 231641 UTC  | The time of the position report should ALWAYS be included when known. |  |
| HAZARDOUS MINE ADRIFT IN VICINITYATUTC  |   |  |
| UNLIT DERELICT TANKER ADRIFT IN VICINITY AT UTC   |   |  |
|   |   |  |
| Note: A. Consideration should be given to cancelling the time has elapsed for the position to have been | he warning after sufficient<br>come degraded.                         |  |
| B. Time is to be UTC. See page C1.  |   |  |
|   |   |  |
|   |   |  |
|   |   |  |
|   |   |  |
|   |   |  |

## **MISCELLANEOUS**

| Key Subject  | Comments  |
|--|---|
| CABLE OPERATIONS BY CABLESHIP "NAME" IN VICINITY FROM UTC TO UTC. WIDE BERTH REQUESTED.  | Use "requested" when wide berth is for benefit of cableship.                |
| CABLE OPERATIONS BY CABLESHIP "NAME"  OPERATING WITH SUBMERSIBLE AND GUARDSHIP  BETWEEN AND  FROM UTC TO UTC.  CONTACT VHF CHANNEL 12. WIDE BERTH ADVISED. | Use "advised" when operations create a significant hazard.                  |
| LARGE UNWIELDLY TOW FROM LE HAVRE TO BOSTON WIDE BERTH REQUESTED.  |   |
| FIRING EXERCISES FROM ANDOYA RANGE IN AREA BOUNDED BY TO UTC UTC UTC. CONTACT RANGE CONTROL VHF CHANNEL 16 BEFORE TRANSITING AREA. CAUTION ADVISED.        |   |
| 95 FOOT FISHING VESSEL "NAME" UNREPORTED ON VOYAGE FROM MIAMI TO GIBRALTAR. REPORT SIGHTINGS TO COAST GUARD MIAMI.   |   |
| SEISMIC SURVEY BY MV "FOX" TOWING 3000 METRE ARRAY IN AREA BOUNDED BY  |   |
| VESSEL IN DISTRESS. MV "PLUGLESS" SINKING IN VICINITY  |   |
| ASSISTANCE REQUIRED. REPORTS TO COASTGUARD MIAMI.  | Position known.   |
| VESSEL IN DIFFICULTY. MV "GUY FAWKES" ON FIRE. ASSISTANCE REQUIRED. REPORTS TO FALMOUTH COASTGUARD OR CROSS JOBURG.  | Position Unknown. Reporting point may be  "nearest/any Coastguard station." |
|  |   |

# **ELECTRONIC NAVAIDS**

| Key Subjects  | Comments   |
|---|--|
| OMEGA. STATION F ARGENTINA OFFAIR UTC TOUTC.  CANCEL THIS MESSAGEUTC.  GPS. SATELLITE PRN 13 UNUSABLEUTC TOUTC.  CANCEL THIS MESSAGEUTC.  SATNAV. TRANSIT. SATELLITE 30230-12  UNUSABLE.  LORAN. STATION SAINT PAUL ISLAND 9990 MASTER OFFAIRUTC TOUTC. CANCEL THIS MESSAGEUTC.  DECCA. JAPAN SEA AND EASTERN CHINA SEA. NORTHERN KYUSYU DECCA CHAIN 7C OFFAIR. | Cancel 1 hour after time of restoration(if known).  Messages concerning long range electronic navaids will not normally need a General Area, Locality or Chart Number.  Do not use "Until Further Notice" since the fact that the event is complete will always be apparent from the cancellation message. |
| DECCA. NORTHWEST BRITISH CHAIN 3B. RED TRANSMISSION OFFAIR. CANCEL THIS MESSAGEUTC.   | Message cancels 1 hour after event completes.  |
| OMEGA. POLAR CAP DISTURBANCE IN PROGRESS. SIGNALS INVOLVING POLAR PATHS MAY HAVE ERRORS AS GREAT AS ONE FIFTH A LANE OR MORE.   | Use "Disturbance" instead of "anomaly" or "absorption."  |

# **CANCELLATIONS**

**B10** 

| Key Subjects   | Comments  |
|--|---|
| A. CANCEL 123/92 AND THIS MESSAGE  | Stand alone cancellation messages may be in form A. or B.   |
| B. SELF CANCELLING. CANCEL AUSCOAST 42. SURVEY COMPLETE.  C. [MESSAGE TEXT - EVENT OF KNOWN DURATION]. CANCEL THIS MESSAGEUTC, | Only include a reason for the cancellation if it can be stated concisely and is not obvious.  Choose a time for self cancelling messages (type C.) 1 hour after the event completes or 1 day later if time is not accurately known. |
| BULLETIN   |   |
| NAVAREA XXX WARNINGS IN FORCE. ONLY THOSE ISSUED IN THE LAST 42 DAYS ARE INCLUDED.  XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXX   | Normally only includes those issued in previous 42 days.  |

C<sub>1</sub>

#### TIME

Time should always be quoted in UTC. The standard form is DDHHMM UTC MoMoMo YY; e.g. 231642 UTC JUN 92. The month and year need only be included when required for clarity.

#### **POSITION**

Position should always be given in Degrees, Minutes and decimal minutes in the form:

DD - MM.mm N or S DDD - MM.mm E or W

Note that leading zeros should always be included. Three digits are used for reporting degrees Longitude.

Positions should only be quoted to the accuracy required. In many cases this will be less than the known accuracy. For example, it will often be sufficient to quote position to the nearest whole minute of Latitude and Longitude when indicating the location of a charted feature. The best accuracy available (to a maximum of 0.01 minutes) should be used when broadcasting the position of new hazards.

The same level of accuracy should always be quoted for both Latitude and Longitude.